

WHAT IS CLAIMED IS:

- 1 1. A method for enhancing contrast in a digital projector, comprising:
2 positioning a first optical component and a second optical component
3 along a light path, said first optical component and said second optical component
4 being separated by a gap; and
5 sealing a perimeter of said gap with a sealant.
- 1 2. The method of claim 1, further comprising:
2 evacuating said gap to provide substantially a vacuum in said gap.
- 1 3. The method of claim 2, wherein said first optical component is a
2 digital micro-mirror device cover plate and said second optical component is a total
3 internal reflection prism.
- 1 4. The method of claim 1, wherein said first optical component is a
2 digital micro-mirror device cover plate and said second optical component is a total
3 internal reflection prism.
- 1 5. The method of claim 1, wherein said sealant is positioned substantially
2 along a perimeter of at least one of said first and second optical components.
- 1 6. The method of claim 1, wherein said gap is filled with a fluid.
- 1 7. The method of claim 6, wherein said fluid has a refractive index
2 substantially similar to a refractive index of at least one of said first and second
3 optical components.
- 1 8. The method of claim 6, wherein said fluid is a liquid.
- 1 9. The method of claim 6, wherein said fluid is a gel.
- 1 10. The method of claim 1, wherein said gap is filled with an adhesive.

1 11. The method of claim 10, wherein said adhesive has a refractive index
2 matching at least one of said first and second optical components.

1 12. A system for enhancing contrast in a digital projector, comprising:
2 a first optical component and a second optical component positioned
3 along a light path and being separated by a gap; and
4 a sealant adapted to seal said gap substantially along a perimeter of
5 said gap.

1 13. The system of claim 12, wherein said gap is evacuated to provide
2 substantially a vacuum in said gap.

1 14. The system of claim 13, wherein said first optical component is a
2 digital micro-mirror device cover plate and said second optical component is a total
3 internal reflection prism.

1 15. The system of claim 12, wherein said first optical component is a
2 digital micro-mirror device cover plate and said second optical component is a total
3 internal reflection prism.

1 16. The system of claim 12, wherein said sealant is positioned along a
2 perimeter of at least one of said first and second optical components.

1 17. The system of claim 12, wherein said gap is filled with a fluid.

1 18. The system of claim 17, wherein said fluid has a refractive index
2 substantially similar to a refractive index of at least one of said first and second
3 optical components.

1 19. The system of claim 17, wherein said fluid is a liquid.

1 20. The system of claim 17, wherein said fluid is a gel.

1 21. The system of claim 12, wherein said gap is filled with an adhesive.

1 22. The system of claim 21, wherein said adhesive has a refractive index
2 matching at least one of said first and second optical components.

1 23. A system for enhancing contrast in a digital projector, comprising:
2 a first optical component and a second optical component positioned
3 along a light path and being separated by a gap; and
4 means for sealing said gap substantially along a perimeter of said gap.

1 24. The system of claim 23, wherein said gap is evacuated to provide
2 substantially a vacuum in said gap.

1 25. A system for enhancing contrast in a digital projector, comprising:
2 a first optical component and a second optical component positioned
3 along a light path and being separated by a gap; and
4 means for restricting airflow through said gap.

1 26. The system of claim 25, wherein said gap is evacuated to provide
2 substantially a vacuum in said gap.

1 27. A digital projector, comprising:
2 at least two optical components positioned along a light path;
3 a gap formed between two of said optical components; and
4 a sealant adapted to seal said gap substantially along a perimeter of
5 said gap.

1 28. The system of claim 27, wherein said gap is evacuated to provide
2 substantially a vacuum in said gap.